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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,090	/666,090 09/19/2003		Robert C. Lam	02074/02091	8977
43215	7590	05/04/2005		EXAMINER	
BORGWARNER INC.				SPERTY, ARDEN B	
PATENT DEPARTMENT 3850 HAMLIN ROAD				ART UNIT	PAPER NUMBER
AUBURN HILLS, MI 48326-2872				1771	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.   10/666,090   LAM ET AL.    The MAILING DATE of this communication appears on the cover sheet with the correspondence address  Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.							
Office Action Summary  Examiner  Art Unit  1771  The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely							
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<ul> <li>If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> <li>Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>							
Status							
1) Responsive to communication(s) filed on <u>02 February 2005</u> .							
2a)☐ This action is <b>FINAL</b> . 2b)☒ This action is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
<ul> <li>4)  Claim(s) 1-27 is/are pending in the application.</li> <li>4a) Of the above claim(s) 18-27 is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-17 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>							
Application Papers							
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)							
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152) Paper No(s)/Mail Date							



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#### NON-FINAL OFFICE ACTION

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#### Election/Restrictions

1. Applicant's election of claims 1-17 in the reply filed on 2/02/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### Specification

- 2. The use of the trademark "Celite" has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.
- 3. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

## Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 4, 5 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As stated above, "Celite" is a registered trademark. According to MPEP 2173.05(u), "... [A] trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus a trademark or trade name does not identify or describe the goods associated with the trademark or trade

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name. ... The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. Thus, the use of a trademark or trade name in a claim to identify or describe a material or product would not only render a claim indefinite, but would also constitute an improper use of the trademark or trade name." It is the examiner's understanding that "Celite" (claim 5), is a trade name for diatomaceous earth (claim 13), or silica, SiO<sub>2</sub>, which is the same as that which is required by claim 4. The difference between the limitations of claims 4 and 5 are unclear. If the claims are redundant, one should be cancelled. If Applicant intends the claims to require different materials, then the claims should be drafted as such, without the trade name "Celite." Claim 13 is included in this rejection because it is unclear what Applicant assumes the difference to be between Celite, silica, and diatomaceous earth. It is unclear which term is the broadest and which is the narrowest.

## Claim Rejections - 35 USC § 102/103

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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7. Claims 1-3, 7-8, 10, 12, 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Patent 6001750 to Lam.

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- 8. The Lam reference teaches a fibrous base material comprising a porous primary fibrous base material layer and a secondary layer comprising carbon particles, the base material being impregnated with a resin (Abstract). The friction modifying particles have a size of from about 0.5 to about 80μm, are present in an amount of from about 0.2 to 20% by weight, and cover about 3 to 90% of the surface area of the primary layer (col. 10, line 65- col. 11, line 15). The base material is impregnated with a resin in the amount of about 5 to about 80% by weight, and the resins include those claimed by Applicant (col. 5, lines 50+).
- 9. Although the reference does not specifically dictate the shape of the carbon particles, i.e. whether or not they are geometrically symmetrical, the base material of the prior art appears to be in all respects the same as that claimed by Applicant. The prior art material uses the same materials as Applicant, including the same size particles, in the same amount, and the same kind and amount of resin, and the prior art possesses the same properties, such as fluid permeability, as Applicant's base material. Also, the indication by the reference that the particles have an average diameter size implies that the particle has the round shape that is seen to read on the claimed particle shape limitations. Therefore, the prior art suggests that the particles used are geometrically symmetrical. In the alternative, it would have been obvious to one of ordinary skill in the art to include said particles according to the teaching of the reference. See In re Best,

195 USPQ 433 as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102(b).

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10. It is further interpreted that the limitations of claims 2 and 3 are inherently met by the prior art since the product of the prior art is made by the same process as recited by Applicant, in addition to being made of the same materials as stated above.

## Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 4-6, 9,11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lam, US Patent 6001750, as applied to claim 1 above, and further in view of US Patent 6630416 to Lam.
- 13. While the '750 reference teaches a secondary layer comprising carbon particles, the reference is silent with respect to the secondary layer further comprising silica particles. The '416 reference teaches a similar base material, which has included in the secondary layer an amount of silica particles to provide an improved friction surface ('416 reference, col. 9, lines 20-35). It would have been obvious to one of ordinary skill in the art to incorporate the silica particles in the secondary layer taught by the '750 reference, motivated by the desire to provide the friction material with a smooth friction surface, providing a smooth shift feel and minimizing shudder. Since the same materials

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are used by Applicant as are used by each of the prior art references, the shape limitations required of Applicant's claimed silica particles are seen to be inherently met. While the '416 reference does not express the amount of silica and carbon particles in relation to each other, the same weight percents of silica and carbon particles, relative to the weight of the base material, are used in the prior art as are used in the presently claimed invention. In the alternative, it would have been obvious to one of ordinary skill to optimize the amount of each material. Absent a showing of unexpected results with the claimed amounts, no difference is seen between the present invention and that which is taught or obvious over the prior art.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arden B. Sperty whose telephone number is (571)272-1543. The examiner can normally be reached on M-Th, 08:00-16:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571)272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Arden B. Sperty

Examiner Art Unit 1771

April 28, 2005

CHERYL A JUSKA PRIMARY EXAMINER